I Spy….. Getting your Eye in. **TASK SHEET**

6h June 2026

This is all about observing and interpreting bee behaviour, so please feel free to query anything you find puzzling or not very well explained.

I will talk for 20min – 1/2 hour to explain what the exercise is all about.

You will be divided into groups and allocated a hive to study with an experienced helper.

Follow the **Task Sheet** questions and make notes as you go if you wish. We will be around to help answer questions and point things out if you get stuck.

After the Practical session we will discuss what you have or have not seen back at the Bee Shed over tea and cakes.

Before opening hive	Possible Observations / Deductions?
Consult the hive record sheet, and consider recent weather conditions. What can you predict from this information?	Two possible scenarios: Record says low on stores, weather poor – FEED Record says good stores, weather fine – ADD SUPER(S)
What is flowering now, and what will be flowering in next 7 days? Implications?	Two possible scenarios: Oil seed rape out now, will cease soon – BAD TEMPER! Not much out at the moment, but May blossom starting – watch SPACE in supers and ADD boxes in plenty of time.
Hive entrance activity? Air temperature? Pollen loads? Drones? Nectar loads?	 10°C minimum for activity. Pollen loads easy to spot. Drones, indicator of swarm possibility. Check in brood box. Bees returning with nectar loads, honey stomach full, legs hanging down.
Orientation flights? Robber bees? Asian hornet	Young bees first emergence. Characteristic flight pattern. Don't confuse with swarm emergence. Robber bees enter hive empty (legs up), and leave full (legs down). Hawking behaviour.
Examine varroa mesh floor. Distribution of debris? Mites? Significance of dark cappings and/or white cappings in debris? Count different coloured pollen loads.	Distribution/pattern shows where cluster is. Important when winter feeding. Count mites and give average daily mite drop. Dark cappings are from brood comb, therefore bees hatching. White cappings are from bees consuming honey stores. How many different colours? 6 or more should give adequate nutritional diversity.
Antenna cleaning action at entrance. Signs of: a) Nosema, b) ABPV, c) DWV. Fanning.	Very rapid cleaning of antennae before flight. a) Diarrhoea streaks, b) Shiny bees & quivering bees, c) Deformed wings. Nazanov gland not visible – temperature/humidity control. Nazanov gland open – colony has been disturbed.

After opening hive	Possible Observations / Deductions?
First impression. Crowded or uncrowded? Space for queen to lay?	Does activity equate with what you saw at the entrance? Should be space for queen to lay. Do you see pollen blocking or solid stores?
Supers. Do bees have enough space to process and store nectar / honey? Are extra supers needed?	Space for workers to process nectar is 2-3 times space required to store honey. Add under existing super or above? Discuss.
In brood chamber examine frames and note: Brood in all stages (MUST see eggs) Queen present? How many drones? (a few, fair number, lots) Queen cells or cups? What is your assessment?	Has anyone NOT seen eggs? Drone numbers may indicate likelihood of swarming. Dry cups or cells are nothing to worry about at present. Only need to take action if cells are charged with royal jelly/larvae.
Shake bees off frames and examine for disease - Perforated cappings, - Sunken cappings, - Larvae that 'don't look right', - Chalk brood, - Deformed wings, - Sac brood. - Bald brood - a sign that bees are uncapping brood to deal with varroa.	If you need a demo, ask the experienced beekeepers. I would like all participants to make sure they can do this. Check for queen before shaking. Make sure you recognise the difference in bald brood from wax moth damage and uncapping varroa mites.
Is the brood chamber filled with brace and burr comb or even drone brood stuck everywhere? If so, what is going on?	Bees desperate for space will build drone comb anywhere. Ideally, provide somewhere for them to lay drones from April onwards. Discuss alternatives, half frame, drone foundation. Maybe the bee space is wrong.
Inspect the brood laying pattern and interpret what is happening.	Irregular pattern could be: - New queen still learning. - Old queen fading. - Disease or old comb - (Diploid drones)
Ratio of eggs : open brood : sealed brood. Comment on findings.	Ideally, should be in ratio 1 : 2 : 4, but will vary with season, weather, forage, etc. If no eggs, could be swarm preparations, dearth of forage, poor weather (or need new glasses!).
What is bee space in brood box? What is bee space in supers? Spacing for new foundation (brood and super).	2 bee spaces on face of brood comb, 1 bee space elsewhere. 1 bee space for supers. Standard Hoffmann spacing is 35mm. No fewer than 10 frames in National super.